

This is a preprint of an article whose final and definitive form has been published in Digital Creativity 2011 - copyright Taylor & Francis; Digital Creativity is available online at:  
<http://www.tandfonline.com/doi/abs/10.1080/14626268.2011.578577>

Title: From Counter-Strike to Counter-Statement: using Burke's pentad as a tool for analysing video games

Authors: Jeroen Bourgonjon, Kris Rutten, Ronald Soetaert and Martin Valcke

Affiliation: Department of Educational Studies, Ghent University, Ghent, Belgium

E-mail: [jeroen.bourgonjon@ugent.be](mailto:jeroen.bourgonjon@ugent.be); [kris.rutten@ugent.be](mailto:kris.rutten@ugent.be); [ronald.soetaert@ugent.be](mailto:ronald.soetaert@ugent.be); [martin.valcke@ugent.be](mailto:martin.valcke@ugent.be)

Abstract:

As video games increasingly become an important frame of reference and as they are more and more taken seriously in education and research, there is a growing need for a methodological tool for video game analysis. In this paper, rhetorical theory in general and pentadic analysis in particular are introduced as useful means to stimulate a critical approach of video games. A case study is presented in which a popular video game (Bioshock) is analysed using this rhetorical approach. It is argued that pentadic analysis can overcome a number of binary discussions within the contemporary field of video game criticism, thus offering interesting perspectives for research and education (e.g. as a reflection tool).

### **Abstract**

As video games increasingly become an important frame of reference and as they are more and more taken seriously in education and research, there is a growing need for a methodological tool for video game analysis. In this paper, rhetorical theory in general and pentadic analysis in particular is introduced as a useful approach to stimulate a critical approach of video games. A case study is presented in which a popular video game (Bioshock) is analysed using this rhetorical approach. It is argued that pentadic analysis can overcome a number of binary discussions within the contemporary field of video game criticism, and that it offers interesting perspectives for research and education (e.g. as a reflection tool).

**KEYWORDS:** game studies; dramatism; new rhetoric; procedural rhetoric; media literacy

## 1 Introduction – Games and procedural rhetoric

As video games are increasingly taken seriously in education and research, there are growing concerns about the underlying meaning-making processes in games (Gee 2010, Tanenbaum and Tanenbaum 2010). An important theory within this field is developed by video game researcher and designer Ian Bogost. In *Persuasive Games* (2007) he argues that video game players are subject to a new type of persuasion which he refers to as *procedural rhetoric*. This new type of rhetoric is based on meaning making through the selective simulation of specific rules. Games do not as much persuade players by telling them things (games as representations), but rather by confronting them with the results of their actions through the game rules. Therefore, games provide a perspective on, as Bogost explains, “how things work” (2007. p. 57).

According to game scholars that stress the strong influence of the game rules and procedures (e.g. Frasca, 2001), players voluntarily submit to the game rules in order to immerse in the game. In other words, they are “being persuaded to think within the constraints of the game” (McAllister 2004. p. 161). Current research in game-based learning (Buckingham and Burn 2007, Hsu and Wang 2010, Pelletier 2005) therefore focuses on how people can become more reflective and critical about the meanings in games in order to learn something about the dynamics of systems and domains like economy, ecology, history and science (Gee 2010). While Bogost has contributed to the theoretical understanding of these processes, he did not himself offer a practical tool for such critical analysis, although he did point in the direction of the American rhetorician and literary critic Kenneth Burke [1897-1993]. Based upon these suggestions (Bogost 2007, 2008) and the work of numerous other

authors (Bourgonjon 2008, Gee 2006, McAllister 2004, Thompson 2009, Walz 2005), this article examines the potential of Kenneth Burke's theory of dramatism and his dramatisic pentad as a methodological tool to critically analyse perspective taking and meaning making in video games. Firstly, rhetorical theory is explored as a framework for understanding video games as a mode of human symbol use. Secondly, Burke's pentad (1969a) is suggested as a tool for analysing video games. Thirdly, this strategy is applied to a popular commercial video game, Bioshock (2K Boston and 2K Australia 2007). Fourthly, the benefits of this particular methodology are discussed in relation to (a) other methodological approaches and (b) educational perspectives. Finally, suggestions for future research are formulated.

The pentadic analysis of Bioshock presented in this article does not suggest a single "appropriate" reading of the game but rather illustrates how the pentad serves as a useful tool for analysing video games from multiple perspectives. In the case of Bioshock, the perceptions of the game developers and the players are analysed, revealing a mismatch between the representational and the procedural layers of the game. At the representational level the game is understood as a "proverb writ large" that names a situation in which a moral dilemma is presented, while at the procedural level the game can also be explained as a search for the optimal set of weaponry. In addition, this case study illustrates how the pentad enables a confrontation between what happens in a video game with real-world issues and the culturally dominant accepted ways of dealing with them (in this case e.g. innocence of childhood, long-term vision...).

## **2 Kenneth Burke and video games**

### **2.1 New Rhetoric**

Kenneth Burke is often considered as one of the founding fathers of the “new rhetoric tradition” (Enos and Brown 1994 , Foss 2004) . This tradition proposes a change in perspective from rhetoric as the practice of “mere” persuasion to rhetoric as “the human use of symbols to communicate” (Foss 2004. p. 4). Moving away from a more traditional focus on rhetoric as the ability to use the most effective means of persuasion for specific situations, the new rhetoric “emphasizes larger issues such as the cultural contexts and general structures of rhetoric” (Herrick, 2004, p. 223), focusing on “rhetoric as a means of understanding and living successfully in a world of symbols” (Herrick, 2004, p. 223). Burke described humans as “symbol-using animals” (Burke 1966. p. 16) to indicate that all human action is fundamentally rhetorical, because “when we speak, act, dress, eat, and generally conduct our lives we communicate and, in doing so, persuade others, including ourselves” (Gussfield 1989. p. 17). Persuasion is inevitable, since *using* symbols implies *selecting* some and not other, and this selection involves a *choice* that is not without consequences – every way of describing a situation or phenomenon (e.g. how things work) is an indication of “how we are perceiving it, the choices we see available to us, and the action we are likely to take in that situation” (Foss 2004. p. 384).

## 2.2 New Rhetoric and video games

Within the field of video game studies scholars have already picked up and adapted Burke’s rhetorical perspective to discuss the identification processes between gamers and their games (Walz 2005, Boone 2008) and to study the ecosystem of creation and play (McAllister 2004). More recently, scholars are turning to Burke’s concept of literature and drama as “proverbs

writ large” (Burke 1973), to examine whether video games too can help us to name recurrent situations and provide us with strategies for dealing with them (Bourgonjon 2008, Gee 2006, Voorhees 2009). Bourgonjon (2008), for example, argued that games can be studied as tools that provide culturally dominant views on social conflicts and ethical dilemmas. In addition, Voorhees (2009) demonstrated that role-play games like the Final Fantasy series can be understood as simulations that “allow players to experiment with different responses to cultural difference” (para. 1). From this perspective, video games can be described as an “equipment for living” (Burke 1973).

### **2.3 The dramatistic pentad**

Burke (1966, 1969a, 1969b) developed the *dramatistic pentad* as a method to examine “the implications expressed through symbolic forms” by studying people’s actions (Hansen 1996, p. 56). He demonstrated how the five basic elements of drama (*act, agent, agency, scene, and purpose*) constitute a pentad of terms that people refer to when they try to explain the world and offer interpretations about their motives for what they are doing. Burke’s focus is not so much on the terms themselves, but on the ratios between these terms: “a ratio is a pairing of two of the key terms that allow a critic to investigate how the first term in the pair affects the second” (Foss, 2004, p. 385). From this perspective, Bruner (2004) emphasizes that it is trouble or conflict that drives a drama, and an analysis of narratives – and games as we will argue – can focus on the conflict that is “generated by a mismatch between two or more of the five constituents of Burke’s pentad” (p. 697).

The first step in a pentadic analysis is to identify and to label the five key terms. By identifying the five pentadic terms one gets a first overview of how a certain situation is named. The next step is to apply the ratios. Applying the ratios “comes down to the systematic pairing of the elements in the pentad to discover the relationship between them and the nature of the influence each has on each other” (Foss, 2004, p. 385). As Foss (2004, p. 385-390) makes clear, there is no right ratio with which to begin the process, one should begin by selecting randomly two of the terms to pair. By reviewing the ratios in this way, one should be able to produce a pattern that points to dominant terms in a rhetorical artefact (e.g. a game). Focusing on different dominant terms and the mismatches between terms offers a more in-depth view of how a situation is named. More importantly, these ratios help to open up a text to multiple perspectives: “we can identify an ‘act’ in a text, then investigate how the other terms are related” (Blakesley, 2002, p. 33).

An important concept in the dramatistic model is that of circumference (Burke 1969a). Burke uses the concept of circumference to suggest that the scope of an analysis can be shifted, enlarged or reduced (Rutten, 2010). Therefore, “one could easily imagine [studies] in which the pentadic analyses were gradually telescoped out, from the game, to the playing of the game, to the reading about the playing of the game, to the analysis of readings that talk about the playing of the game, ad infinitum” (Thompson 2009. p. 281). Changing the circumference adds both complexity and ambiguity to the analysis, since it may cause a radical shift in each of the *ratios* – and thus in the interpretation as well. According to Burke this ambiguity is necessary in order to understand the meaning and the range of an isolated argument, because “what we want is not terms that avoid ambiguity, but terms that clearly reveal the strategic spots at which ambiguities necessarily arise” (Burke 1969a. p. xviii).

## 2.4 The dramatistic pentad and video games

Even though Burke developed the pentad based on the study of literature and drama, he did not limit the use of the dramatistic pentad to verbal and written language (Brummett 2006). Instead, he opened up the domain of rhetoric to “include nonverbal domains known and yet to be invented or discovered” (Bogost 2008. p. 124). He suggested that the pentad provides an answer to the question of “what is involved when we say what people are doing and why they are doing it?” (Burke 1969a. p. xv) and it is precisely this focus on people’s “talk about” (Burke 1969a. p. 67) that can be read as a stimulus to analyse new media in general and video games in particular (Thompson 2009. p. 67). Not surprisingly, the pentad is increasingly considered as a useful tool for critically examining video games (Bourgonjon 2008, Shields 2009, Thompson 2009). Not only does it answer the call for studying the fundamental similarities between drama and human-computer interaction (Laurel, 1991; Mateas, 2002), it also fits the theory of procedural rhetoric (Bogost 2007), since it enables a comparison between the game-world rules with real-world issues. According to Voorhees (2009), “Burke encourages us to look for linkages that direct the critic outside of the text to the contemporaneous situations they describe” (para. 1).

The pentad’s ability to deal with ambiguity makes it an even more interesting tool for use in the field of video game studies. Not only can it help to identify the ideological content and thus engender critical awareness about video games, but the systematic pairing of elements can also help to open up the interpretation of the game to perspectives that would otherwise be ignored: “dramatism enables us to see not only the grounds of these interpretations, but to enable alternative ones by forcing categorical expectations to shift and



thus generate new ways of seeing” (Blakesley 2002. p. 41). Therefore, it can serve as a useful tool to compare the perspectives of the designers as reflected in the game with the perspectives of the gamers as for example reflected on popular game websites, but also to contrast the game narrative with the interactive character of the game rules. In what follows, a case study is presented in which a popular video game – Bioshock (2K Boston and 2K Australia 2007) – is described and then analysed using Burke’s *dramatistic pentad*, illustrating its potential as a tool for dealing with ambiguity and stimulating critical reflection.

### **3 Object of analysis**

#### **3.1 Selection of the game Bioshock**

For this case study, Bioshock (2K Boston and 2K Australia 2007) was chosen as the object of analysis, mainly for two reasons. The first reason is the popularity of the game. Judging by the awards the game has won, its impressive sales figures, and its ranking in the charts, it is safe to conclude that Bioshock is a very popular game and therefore a representative case. The second reason for selecting Bioshock is that it belongs to the genre of the *first person shooter*. This genre is notorious, because it is argued that exposure to this kind of games might lead to an increase of aggressive behaviour. Games like Doom (Id Software 1993) and Counter-Strike (Valve Software 1999) are blamed for evoking an epidemic of youth violence, as reflected in the massacres in Columbine (United States) and Erfurt (Germany). A lot of these accusations stem from the observation that these games combine fast paced action with graphically explicit violence, all of which is perceived from a first person perspective: the player is looking through the eyes of the main character. Therefore it is not surprising that Bioshock, like most first person shooters, is sold in Europe with an 18+ rating and a warning

about blood shedding, drug references, intense violence, sexual themes and foul language use. Precisely the combination of Bioshock's popularity and the controversy surrounding its genre is what makes this game such an interesting case for a rhetorical analysis of the underlying processes in video gaming.

### **3.2 Synopsis of Bioshock**

In Bioshock (2K Boston and 2K Australia 2007), players take on the role of Jack, a sole survivor of a plane crash in the Atlantic Ocean. While swimming, the players discover a submarine that takes them to the underwater city of Rapture. This city was founded by Andrew Ryan as a forum for the best scientists, artists and medical doctors to work in absolute freedom. Andrew Ryan can be looked upon as a devotee of the philosophy of objectivism – a theory/philosophy of ethical egoism that focuses on humans as self-interested agents. His name shows striking similarities with the name of Ayn Rand, who is often referred to as the founder of objectivism. When players enter the city, it becomes clear that something has gone terribly wrong. By means of writings on the walls, radio messages and audio diaries that have been left behind, the players become immersed in the story of Rapture's demise. Whether this collapse was due to an overdose of objectivism, or due to not rigorously following this philosophy, is unclear to the players. The only certainty they have, is that they find themselves trapped in a maze filled with genetically engineered and ultraviolent villains. To survive, they will have to equip a good share of fire arms and fight their way through Rapture. As in most other games, each villain is a little bit stronger than the previous one. In order to keep up with these more powerful enemies, the players are taught how to acquire super powers by injecting themselves with a substance that alters their

genetic code: *ADAM*. To become extra powerful, the players will need increasingly more *ADAM*, which – shockingly – can only be found in little girls. When players are confronted with one of these girls, they have to choose whether they want to *harvest* or *rescue* her. *Harvest* is a euphemism for killing the girl and extracting a maximum amount of *ADAM* in the process, whereas *rescue* stands for keeping the girl alive, but by doing so only receiving a tiny drop of *ADAM*.

## 4 Pentadic analysis

In the next section the confrontation with the little girls is analysed from both a developer's and a gamer's perspective, as reflected in weblogs, in interviews and on message boards of popular game websites, based on the concept of circumference. The terms of the pentad are named and combined with each other in order to examine meaning-making processes and dominant cultural beliefs in people's talk about videogames.

### 4.1 Game perspective

The first part of the pentadic analysis is based on a number of online published interviews (e.g. Williams, 2006; Perry, 2006) with Ken Levine, the creative director of 2K Boston and 2K Australia (*agents*). The *scene* in which these developers operate is the video game industry, which has become an important and very competitive sector within the global economic system. With *Bioshock*, Levine and his team wanted to provide the players an exceptional experience in the genre (*purpose*). For this critical analysis, it is interesting to

focus on what the developers say they have done in order to create this particular experience (*act*), and what techniques they have used (*agency*). In this analysis, the focus is on both the representational and on the procedural game design act. Both can be read as interesting developer *agencies* that are used to intensify the confrontation with the Little Sisters. With regard to the representational agency, the focus of the analysis is on the dramatistic dialogue that is staged for the players before they make their first decision whether to harvest or rescue the Little Sisters. The conclusions of this analysis are then confronted with the procedural *agency*, the game rules that regulate the consequences of the players' choices.

#### 4.1.1 Representational level

At the representational level, the game tells the story of Bioshock using conventional methods (cut scenes) and methods that were previously rather unexplored in the video game genre (there are opportunities for eavesdropping, the player can pick up and listen to audio diaries that have been left behind...). Particularly interesting is the dialogue that is staged for the players when they have to decide on the fate of the Little Sisters for the very first time. It is quite clear that the *purpose* of this dialogue between “Atlas” and “Tenenbaum” is to confront the players with the likely repercussions of their choice. From a rhetorical perspective, it is interesting to analyse how this dialogue is staged, by examining the arguments and physical appearance of the protagonists, Atlas and Tenenbaum.

Atlas – who has been the guide of the player from the beginning of the game – speaks to the players through a radio. He warns the players that they will need all the ADAM they can find, given the extreme circumstances of Rapture being under attack by ultraviolent

creatures. Therefore the players should harvest all of the Little Sisters they can find. After all, as Atlas explains, appearances can be deceiving and these girls are not what they look like – they are nothing but a means to transport ADAM. At the same time, a woman named Tenenbaum appears on a balcony with an entirely different story. She appeals to the humanity of the players and begs the players to keep the little girls alive. As an extra incentive, she promises that saving the girls will be worthwhile.

A pentadic analysis here reveals the dominant perspectives in the argumentation of both Tenenbaum and Atlas. Tenenbaum's argument is based on a **purpose-act ratio**. She asks the players to use a moral perspective – humanity – as their guide in making the decision to either kill or rescue the little girl. Therefore, Tenenbaum appears to be morally superior, which is an idea that the game developers have tried to reinforce by addressing a number of culturally accepted dominant beliefs. For example, Tenenbaum is put in the same room as the players and therefore the players can watch her facial expressions, her non-verbal behaviour, etc. This makes her story much more personal than Atlas', who only addresses the player through radio. In addition, Tenenbaum expresses dominant beliefs in her argumentation as well – based on the dominance of the purpose. First of all, she promises the players she will make it worthwhile to save the Little Sisters, which resembles the dominant discourse that condemns short-term thinking, while it applauds and rewards a *long-term vision*. A second dominant belief expressed by Tenenbaum is that it seems hard to resist the myth of the *innocence of childhood*, which refers to the symbolical value (“children are sacred”, “children are priceless”) that was attributed to children at the time they were removed from the labour market and lost their economical value (Zelizer 1985).

While Tenenbaum is implicitly pointed at as “good”, the position of Atlas is implicitly condemned for being “bad”. He guides the players through Rapture, hoping that the player will rescue his family in return. When he tells the players to harvest the little girls, he falls back to both a **scene-act** (these extreme circumstances demand an extreme act) and a **purpose-agency ratio** (the goal justifies the means). Even though the situation is somewhat more complex, as Atlas presents himself as a family man whose wife and daughter have been kidnapped, these ratios will leave the players with a more negative impression of Atlas as a character. This is reinforced by his preference for a short-term solution, and the violation of the positive symbolic value of little children.

#### 4.1.2 Procedural level

Given the specificity of video games, it is important to take a look at the game mechanics regarding the harvest-rescue dilemma as well. The ADAM distribution rules are very straightforward. Each time the players harvest a little girl they yield 160 ADAM, but when they choose to rescue them, they only receive 80 ADAM. While the extra ADAM can decrease the difficulty level in the early stages of the game, the difference in rewards is reduced to a minimum as the players receive an additional reward of 200 ADAM and exclusive extras each time they save three little girls. Killing the girls thus provides the players with 480 ADAM, while saving them results in 440 ADAM plus extras.

Although the game mechanics – like the storyline – reflect a *purpose*-driven rationale, the pentad reveals an **agency-act ratio** (the means restrict or determine the act) in the game rules as well. From this perspective, the central theme is neither about morality nor objectivism, but about the choice of weapons. Even though the developers have integrated

three different endings to the game (good, bad and slightly better) depending on the decisions of the players regarding the Little Sisters, and even though this might lead to the impression that the game is about morality and ethical decision making, to a great extent the game is also about what the players can and cannot do in the game. The rules of the game restrain the action. Both the ADAM and the extras can be used to obtain plasmids and gene tonics, which strengthen the players' characters and – more importantly – improve the range of weapons at the players' disposal.

## 4.2 Player perspective

The second part of this pentadic analysis is based on players' talk about playing the game – in particular their talk about the harvesting or rescuing the Little Sisters – as can be read on various internet discussions and personal weblogs. Particularly interesting is that a large group of players reports a change in motivation and actions when choosing between harvest and rescue over time.

In pentadic terms the players' adventure can be described as a dramatic situation. The players (*agents*) find themselves in the ravaged underwater city of Rapture, under constant threat of being killed by villains (*scene*). If they want to survive and advance (*purpose*), they need enough ADAM in order to keep up with the enemies that get stronger as the player progresses through the game. This requires the players to choose between harvesting and rescuing the little girls on their path (*act*), since these girls are supposed to be the only resource of ADAM. In this sense, the girls are no longer considered as (counter)agents, but rather as an *agency*; the means the players use to advance in the game.

At first the players seem to respond very emotionally, founding their argumentation on an **agent-act ratio**. Players explain how they decided to save the girls because it is “not in their nature” to kill little children. In other words, the game has become personal for these players. For example, the catholic priest Miller reports on his blog how he was unable to harvest one single girl in the game both as a human being and as a priest. For him, the idea that other people might choose the role of the merciless executioner even makes him feel “uneasy” (Miller 2007).

However, when players comment on their experience in Rapture, they not only situate their choice for rescuing or harvesting the little girls in the *game-world scene*, but in the *real-world scene* as well. For example, some players argue that the choice between harvest and rescue was indeed emotionally moving at first, but that the emotion was subdued by the curiosity of what would happen next if they had chosen the alternative option. By shifting the scope of the analysis (*circumference*), a different pentad can be described labelling the terms from this real-world perspective instead of an in-game point of view, which makes it easier to interpret the ambivalent emotional response of the players.

In the real-world circumference, the *act* remains the choice between harvest and rescue, the *scene* changes from the city of Rapture to the room where the players (*agent*) are sitting behind their screens. An examination of the internet fora reveals that the agents are playing for a variety of reasons, from escaping everyday routine, over experiencing certain emotions, to being entertained (*purpose*). They use their keyboards and mouses, or simply a controller (*agency*). From within this circumference, the scene dominates the purpose of the player (**scene-purpose ratio**). The choice between harvesting and rescuing the little girls



appears noncommittal since no real child will die every time the players press the harvest button. In this sense, Atlas' statement: "You think that is a child down there? Don't be fooled," underlines the problematic issue of representation, or to rephrase René Magritte's famous quote: "Ceci n'est pas une petite fille".

It appears that the relative ease of choosing between harvest or rescue – a single mouse click – and the knowledge gathered from the discussion fora certainly affects the players' choice. *Agency* becomes the dominant term in their reasoning: what weapons influence the game in such a way that it becomes more fun, interesting, challenging or engaging?

## 5 Discussion

This article started from the perspective that video games open up a new domain for persuasion (Bogost 2007). It was argued that video games can perhaps constitute an "equipment for living" (Burke 1973), because they can help labelling recurrent situations and provide strategies for dealing with them. Pentadic analysis (1969b) was introduced as a tool for reflecting critically on the meaning of video games, and for analysing how the use of symbols influences people's thoughts and behaviour.

A pentadic analysis of Bioshock was presented not to suggest the single most "appropriate" reading of Bioshock, but rather as a case study of how the pentad allows analysing a game from multiple, sometimes conflicting perspectives. In addition, the case study illustrated how the pentad enables a confrontation between what happens in the game

with real-world issues and the culturally dominant accepted ways of dealing with them.

Using the concept of circumference, the talk-about of both the game developers of Bioshock and its players were analysed. A mismatch was found between the representational and the procedural level of the game. It was found that the developers explain and market Bioshock as a “proverb writ large” that names a situation where morality (purpose) is weighed up against the precariousness of the situation (*scene*), whereas often the game experience rather revolves around *agencies*, around finding the best combination of weapons to eliminate the enemies and to create a joyful player experience. By consulting the players’ talk-about this game as well, it was found that the players’ discussions reflect a similar pattern of complexity. At first, players ground their motives for either harvesting or rescuing the Little Sisters in their own nature (*agent*), but it is not long before they *act* counter-intuitively, not just focusing on what would happen with the little girls, but rather exploring the game using a different set of weaponry. In other words, *agency* becomes the central focus of the game for the players as well.

Burke’s pentad helped to uncover dominant ways of seeing in Bioshock and in the players’ responses to these issues (e.g. innocence of childhood, the morality in long-term thinking...). Because the analysis opened up the game to multiple and even conflicting perspectives, it only partially supports the findings of Tavinor (2009), who reviewed Bioshock from a single, narrative perspective and described it as a “masterpiece” because of the “thrilling artistic coherence”. Instead, the pentad points at the ambiguity within Bioshock, and therefore it is more congruent with the findings of Hocking (2007). In what follows, the pentad is discussed in relation to methodological suggestions made within the field of video game criticism, after which the merits of using the pentad as a reflection tool in education are elaborated upon.

### 5.1 Burke's pentad compared to existing methodologies

Over the years, numerous methodological suggestions to study video games have been made. Konzack (2002), for example, argued that an analysis of a video game should include a discussion of at least seven distinct layers: hardware, program code, functionality, gameplay, meaning, referentiality and socio-cultural aspects. Similarly, Consalvo and Dutton (2006) suggested a blueprint for analysis, based on four potentially important perspectives: object inventory, interface study, interaction map and gameplay log (2006). A description of all layers would lead to a deeper understanding of the game.

However, within video game criticism there is a shift from merely describing game elements to analysing actual player experiences. Aarseth (2003) pointed out that a sound methodology requires a clear focus on player experience as well. He therefore proposed three ways to gather knowledge of games: (1) through the creators of the game, (2) through observation of players, and (3) by playing the game. He suggested focusing on the different roles players can take on to counter issues of subjectivity resulting from the single reading of a game session. Similarly, Malliet (2006) suggested to take into account derivative texts such as walkthroughs and forum discussions, because “it becomes very difficult to define what belongs to the ‘text’ of a game and what not, and consequently, what will be the boundaries of the object of analysis” (2006).

The boundaries of the game constitute a key issue here. Video game scholars face a number of dilemmas due to the dynamic character of video games. Should they analyse the

game as it is designed or as it is played (Aarseth 2003)? Do they have to consider games as representations or as simulations (Konzack 2002, Malliet 2006)? Should an analysis stick to the game or does it have to include derivative texts (Malliet 2006)? Does video game criticism limit itself to the boundaries of the *Magic Circle* (Huizinga 1938 [1952]) or can it address issues within the broader social and cultural context as well (Salen and Zimmerman 2004)? An analysis of video gaming as a mode of human symbol use can help to transcend these discussions since the pentad offers “terms that clearly reveal the strategic spots at which ambiguities arise” (Burke 1969a. p. xviii).

Kimberling (1982) compares the effect of a pentadic analysis with that of a prism, “bending rays of light in a variety of directions” (p. 19). This ever-changing focus has been pointed at as one of the main difficulties in Burke’s theory. However, in the case of video games the multiperspectivism is an advantage, as a pentadic analysis does not try to resolve the many discussions in game studies (narratology vs. ludology, representation vs. simulation, reality vs. virtual reality – for an overview see Wardrip-Fruin & Harrigan 2004), but rather addresses the ambiguities that arise when confronting video games. The case study of *Bioshock* clearly shows that the pentad can shed some light on the relation between in-game and real-world actions, between intended play behaviour and actual behaviour, between the game and what happens in the broader social context, and between game rules and representation; precisely because it stimulates the analysts to consider their behaviour from different perspectives. By describing the game itself as an *act*, it allows for the combination of elements from all different layers that influence the game experience, while addressing the inherent complexity and ambiguity of integrating all these perspectives, which answers the call of Pelletier (2005) for a more dynamic approach of video game criticism.

## 5.2 Educational perspectives

The call for a reflective and dynamic approach to video games is not particularly new in the field of simulation and gaming. On the contrary, it resembles the concept of *debriefing*: “using the information generated during the experimental activity to facilitate learning for those who have been through the process” (Lederman 1992. p. 147). The importance of debriefing in an educational context is widely acknowledged (Mayer et al. 2002, Peters and Vissers 2004). It stimulates transfer by scaffolding the learning process, by relating the game experience to real-life situations, and by enabling peer discussion about what skills and knowledge were learned from the game experience (Hsu and Wang 2010, Peters and Vissers 2004). The pentad can be used to achieve these goals. In addition, it can open the eyes to multiple and confronting perspectives. This is an important educational merit, because it can make people aware of their customisation to familiar ways of knowing and seeing (Blakesley 2002, Rutten, 2010) and help them to understand that “every way of seeing is also a way of not seeing” (Burke 1935. p. 70).

Burke described humans as symbol-users that can approach the world either symbol-wise or symbol-foolish (1955. p. 260). Becoming symbol-wise then involves an integration of knowledge, skills, and attitudes in order to understand the “the momentous role that terminology plays in human thought and conduct” (Enoch 2004. p. 276). Somebody who is symbol-wise takes on a reflective attitude by studying all forms of persuasion, in order to “hesitate before making assessments, judgments, or moves to action” (Enoch 2004. p. 287). While Burke (1973) focused on criticism of literature and drama as a way to help students in becoming symbol-wise, he argued that the critics should “use all that there is to use” (p. 23).

In the digitised world, this suggestion implies that video games should be considered as well, because they clearly represent interesting cases of symbolic action.

In education, numerous calls have been made for stimulating a reflective approach to media in general (Jenkins et al. 2006) and to video games in particular (Buckingham and Burn 2007; Zagal 2010; Hsu and Wang 2010). However, if teachers want to stimulate a video game wise approach, they will need particular strategies – tools – for integrating such a reflective perspective in teaching and learning (Hsu and Wang 2010; Zagal 2010). A pragmatic advantage of using the pentad as such a tool is that it builds on something that most teachers and students are already familiar with. Over the years, teachers have discussed events and analysed mediated messages using instruments such as the medieval *hexameter* (who, what, where, by what means, why and when); and the *journalist's catechism*: who, what, when, where and how (Rutten et al. 2010, Overington 1977). While this does not constitute a full-fledged Burkean analysis in itself, teachers can use it as a foundation to familiarize students with the concept of ratios and circumference.

Because studying games in education requires that the resulting knowledge, skills and attitudes are transferrable to curriculum-related issues, the concept of circumference is extremely relevant to education. To stimulate transfer, the circumference of the pentadic analysis can be shifted from the game scene to the real-world scene in general, and to a curriculum-related scene in particular. Video games can be analysed using Burke's pentad, dedicating particular attention to the change in ratios when switching the circumference from the game world to curriculum-related fields. In the case of Bioshock for example, teachers might ask students to explore other contexts in which there is a tension between purpose and

scene, and relate the incentives for action that are offered in the game to those in the real-world situations.

In future research the use of the pentad for analysing video games will need to be empirically examined, as more insight is needed in the specific attitudinal changes caused by (the repeated use of the) pentad. For example, is the effect of pentadic analysis on students' reflective stance temporarily or can it be consolidated? Only when there is enough evidence that this attitudinal change is indeed attained, it can be argued that students have moved from mere playing a game to critically examining it.

## **6 Conclusions**

In this article, Kenneth Burke's theory and practice of dramatism, which is based on his early work (e.g. *Counter-Statement* 1931), is suggested as a useful approach to video game criticism. By analysing a violent video game like *Bioshock*, which belongs to the same genre as *Doom* (Id Software 1993) and *Counter-Strike* (Valve Software 1999), it became clear that Burke's dramatistic pentad can serve as a tool for opening up video games to multiple, even conflicting perspectives. Precisely because these conflicts are embraced in the analysis, the pentad transcends a number of binary discussions within the field of video game criticism. Moreover, by serving as an eye-opener, and by enabling discussion, argumentation and debriefing, the pentad appears to be a useful tool for educational practice. Educators can introduce pentadic video game analysis as a tool to help their students in becoming symbol-wise.

## Acknowledgements

This study was supported by the Ghent University BOF Research Grant B/09640/02, as well as the FWO (Research Foundation Flanders). The authors also want to express their gratitude towards prof. dr. Andrew Stables, prof. dr. Ian Bogost, and to the expert panel at the Games Research Methods seminar 2010 (Tampere, Finland) for their insightful comments on the preliminary versions of this research article. Of course, all mistakes are ours.

## References

- 2K Boston and 2K Australia, 2007. *Bioshock*. 2K Games.
- Aarseth, E., 2003. Playing research: methodological approaches to game analysis. *spilforskning.dk conference*, 28-29 August. W. Bo Kampmann.
- Blakesley, D., 2002. *The elements of dramatism*. New York: Longman Publishers.
- Bogost, I., 2007. *Persuasive games: the expressive power of videogames*. Cambridge: The MIT Press.
- Bogost, I., 2008. The rhetoric of video games. In: Salen, K. ed. *The ecology of games: connecting youth, games, and learning*. Cambridge, MA: The MIT Press, 117-140.
- Boone, G., 2008. *A Burkean analysis of "World of Warcraft": identity work in a virtual environment*. Doctoral dissertation. Villanova University.
- Bourgonjon, J., 2008. A rhetorical analysis of video games. Semiosis as a foundational concept for education, 17 October 2008 Ghent University, Belgium.
- Brummett, B., 2006. *Rhetoric in popular culture*. London: Sage Publications.
- Bruner, J., 2004. Life as narrative. *Social Research*, 71(3), 691-710.



- Buckingham, D. and Burn, A., 2007. Game literacy in theory and practice. *Journal of Educational Multimedia and Hypermedia*, 16(3), 323-349.
- Burke, K., 1935. *Permanence and change. an anatomy of purpose*. Berkley and Los Angeles: University of California Press.
- Burke, K., 1955. Linguistic approaches to problems of education. In: HENRY, N. B. ed. *Modern philosophies and education. The fifty-fourth yearbook of the National Society for the Study of Education, Part 1*. Chicago: University of Chicago Press, 259-303.
- Burke, K., 1966. *Language as symbolic action*. Los Angeles: University of California Press.
- Burke, K., 1969a. *A grammar of motives*. 2nd ed. Los Angeles: University of California Press.
- Burke, K., 1969b. *A rhetoric of motives*. 2nd ed. Los Angeles: University of California Press.
- Burke, K., 1973. *The philosophy of literary form*. 3rd ed. Los Angeles: University of California Press.
- Consalvo, M. and Dutton, N., 2006. Game analysis: developing a methodological toolkit for the qualitative study of games *Game Studies: The International Journal of Computer Game Research*, 6 (1).
- Enoch, J., 2004. Becoming symbol-wise: Kenneth Burke's pedagogy of critical reflection. *College Composition and Communication*, 56(2), 272-296.
- Enos, T. and Brown, S., 1994. *Professing the New Rhetorics: a sourcebook*. New Jersey: Prentice Hall.
- Foss, S. K., 2004. *Rhetorical criticism. Exploration & practice*. Illinois: Waveland press.
- Frasca, G., 2001. *Simulation 101: simulation versus representation* [online]. Ludology.org. Available from: <http://www.ludology.org/articles/sim1/simulation101.html>. [Accessed 7 January 2011].
- Gee, J. P., 2006. Why game studies now? Video games: a new art form. *Games and Culture*, 1(1), 58-61.

- Gee, J. P., 2010. *New digital media and learning as an emerging area and “Worked Examples” as one way forward*. Cambridge, MA: The MIT Press.
- Gussfield, J. R., 1989. *Kenneth Burke. On symbols and society*. Chicago: The University of Chicago Press.
- Hansen, G., 1996. Kenneth Burke’s rhetorical theory within the construction of the ethnography of speaking. *Folklore Forum*, 27(1), 50-59.
- Hocking, C., 2007. *Ludonarrative dissonance in Bioshock* [online]. Available from: [http://clicknothing.typepad.com/click\\_nothing/2007/10/ludonarrative-d.html](http://clicknothing.typepad.com/click_nothing/2007/10/ludonarrative-d.html) [Accessed 1 July 2010].
- Hsu, H.-Y. and Wang, S.-K., 2010. Using gaming literacies to cultivate new literacies. *Simulation & Gaming*, 41(3), 400-417.
- Huizinga, J., 1938 [1952]. *Homo ludens. Proeve eener bepaling van het spel-element der cultuur* Haarlem: Tjeenk Willink.
- Id Software, 1993. *Doom*. Id Software.
- Jenkins, H., et al., 2006. *Confronting the challenges of participatory culture: media education for the 21st century*. Available from: <http://www.newmedialiteracies.org/files/working/NMLWhitePaper.pdf> [Accessed 1 July 2010].
- Kimberling, R. C., 1982. *Kenneth Burke’s dramatism and popular arts*. Bowling Green, OH: Bowling Green University Press.
- Konzack, L., Computer game criticism: a method for computer game analysis. *Computer Games and Digital Cultures Conference*, 2002, Tampere, 89-100.
- Laurel, B., 1991. *Computers as theatre*. Reading, Massachusetts: Addison-Wesley.
- Lederman, L. C., 1992. Guest editorial: After the game is over. *Simulation & Gaming*, 23(2), 143-144.

- Malliet, S., 2006. Adapting the principles of ludology to the method of videogame content analysis. *Game Studies. The International Journal of Computer Game Research*, 7(1).
- Mateas, M., 2002. *Interactive drama, art and artificial intelligence*. Unpublished thesis. Carnegie Mellon University.
- Mayer, R., Mautone, P. and Prothero, W., 2002. Pictorial aids for learning by doing in a multimedia geology simulation game. *Journal of Educational Psychology*, 94, 171-183.
- McAllister, K. S., 2004. *Game work. Language, power, and computer game culture*. Tuscaloosa: The University of Alabama Press.
- Overington, M. A., 1977. Kenneth Burke and the method of dramatism. *Theory and Society*, 4(1), 131-156.
- Pelletier, C., 2005. Studying games in school: a framework for media education. *DiGRA 2005 conference: Changing views - worlds in play*, June 2005, University of Vancouver, Vancouver.
- Perry, D.C., 2006. *BioShock: Ken Levine talks First-Person Shooters. Why is it an FPS? BioShock's lead designer counts the ways* [online]. IGN. Available from: <http://xbox360.ign.com/articles/733/733073p1.html> [Accessed 7 January 2011].
- Peters, V. and Vissers, G., 2004. A simple classification model for debriefing simulation games. *Simulation & Gaming*, 35(1), 70-84.
- Rutten, K., 2010. The rhetorical and narrative turn. Explorations in education. Doctoral dissertation. Ghent University.
- Rutten, K., Mottart, A. and Soetaert, R., 2010. Narrative and rhetoric in social work education. *British Journal of Social Work*, 40(2), 480-495.
- Salen, K. and Zimmerman, E., 2004. *Rules of play. game design fundamentals*. Cambridge, MA: The MIT Press.

- Shields, M. J., 2009. *A pentadic analysis of tropico: dramatism and digital games*. Masters' thesis. Oregon State University.
- Tanenbaum, K. and Tanenbaum, J., 2010. Agency as commitment to meaning: communicative competence in games. *Digital Creativity*, 21(1), 11-17.
- Tavinor, G., 2009. Bioshock and the art of rapture. *Philosophy and Literature*, 33(1), 91-106.
- Thompson, J., 2009. New media texts of WWII: Kenneth Burke's intersection with computer culture. In: Ruggil, J., McAllister, K. and Chaney, J. R. eds. *The computer culture reader*. Newcastle upon Tyne, UK: Cambridge Scholar's Press, 73-89.
- Valve Software, 1999. *Counter-Strike*. Vivendi Universal.
- Voorhees, G., 2009. The character of difference. procedurality, rhetoric, and roleplaying games. *Game Studies. The International Journal of Computer Game Research*, 9(2).
- Walz, S. P., 2005. Delightful identification & persuasion: towards an analytical and applied rhetoric of digital games. In: McAllister, K. and Moeller, R. eds. *Works and days. capitalizing on play: the politics of computer gaming*. 22(43/44). Indiana, PA: Indiana University of Pennsylvania, 185-200.
- Wardrip-Fruin, N. and Harrigan, P., eds., 2004. *First person: new media as story, performance, and game*. Cambridge, MA: The MIT Press.
- Williams, B., 2006. *Our exclusive interview with Irrational's Ken Levine garners the first real new info since E3* [online]. GameSpy. Available from: <http://xbox360.gamespy.com/xbox-360/bioshock/730626p1.html> [Accessed 7 January 2011].
- Zagal, J.P., 2010. *Ludoliteracy: Defining, Understanding, and Supporting Games Education*. Pittsburgh: ETC Press.
- Zelizer, V., 1985. *Pricing the priceless child: the changing social value of children*. New York: Pinceton University Press.